

**Abstract of the Disclosure**

A method of implementing a low-current, area-efficient and flicker noise free bias CMOS voltage control oscillator (VCO) 200 employs a resistor 202 as a current source to the VCO core. By eliminating the transistor current source as employed in conventional designs, the CMOS VCO 200 does not require any reference current source, and thus achieves at least a 10-20% current savings over that achievable using prior art techniques. Further, noise amplification issues from the reference current source do not exist since only a resistor 202 is used as a current source, yielding only resistor thermal noise. The method employed allows low supply pushing, an important factor to be considered in VCO designs.